mSANTÉ PIONEERING MOBILE TECHNOLOGY TO IMPROVE ESSENTIAL HEALTH SERVICES IN HAITI

BACKGROUND

As reflected in Haiti's Demographic and Health Surveys 2005-06 and 2012, myriad natural disasters, cholera outbreaks, and a weak, fractured health system have resulted in setbacks in improving the health of mothers and their children, and combatting HIV.

At 630 maternal deaths per 1,000 live births, Haiti's maternal mortality ratio was extremely high in 2006. It is unclear how many Haitian women died in 2012 as a result of pregnancy and childbirth complications; no data were collected. Between 2006 and 2012, the ratio of children dying under age five increased—from 86 to 88 child deaths per 1,000 live births. HIV prevalence remained constant at 2.2 percent. Compounding these challenges, Haiti suffers from a high unmet need for family planning—currently 37.5 percent—and a high adolescent fertility rate (a 12 percent contribution to the total fertility rate of 3.5).

To realize meaningful progress and to improve health outcomes, Haiti's Ministère de la Santé Publique et de la Population (MSPP) has laid the foundation for a more cohesive and responsive health system. But the country requires targeted support and innovative approaches to realize its goals.

INNOVATION FOR PUBLIC HEALTH

USAID's Services de Santé de Qualité pour Haiti (SSQH-CS) project, in collaboration with the Haitian government and MSPP, integrates the use of mobile tools for health. Led by Pathfinder International with a consortium of partners, the project incorporates the use of mSanté activities and finance tools to improve the delivery of quality health services for the people of Haiti. Santé means health, and mSanté activities infuse technological innovation with traditional public health programming. mSanté uses Interactive Voice Response; SMS; and CommCare,* to improve communication, data reporting, and client case management, while strengthening community and facility- level referral systems.

PROMOTING QUALITY CARE AT THE COMMUNITY LEVEL

To date, SSQH-CS has trained 280 Agents de Santé Communautaires Polyvalent (otherwise known as community health workers or CHWs) to use CommCare to guide their work and streamline their data collection and reporting. These CHWs serve as critical links between Haiti's communities and the facilities

that serve them. Software manufacturer Dimagi, Inc., worked in close partnership with Pathfinder to develop the project's CommCare applications. These "apps" cover major health services offered by CHWs, including integrated maternal and child health, family planning, and HIV services, and support the following:

- **Registration and tracking of clients**, including pregnant women, family planning clients, and people living with HIV;

- **Guidance to CHWs** through electronic checklists, protocols, and algorithms to improve the quality of services delivered, coupled with audio counseling content;

- Automatic **SMS reminders for CHWs and supervisors** to maintain household visit schedules and alert CHWs of services needed at households;

- **GPS tracking** to monitor community-level service delivery;

- **Referral and counter-referral** through client tracking and record sharing functionalities; and

- **Real-time reporting of data** related to services offered at the community level for use by supervisors and program managers.

To improve communications and referrals—for better emergency care during Haiti's Carnival celebrations—SSQH-CS equipped ambulances, first aid stations, and hospitals with tablets and a new emergency response mobile application.

BETTER REFERRAL AND SUPERVISION

These last two capabilities, related to referral and supervision, are key. SSQH-CS has begun equipping project-supported facilities with mobile devices enabled with a CommCare app that helps them track CHWs' work and accept referrals to their facility. Using cloud synchronization, the app allows facilities and CHWs to share client records via a mobile network—to view clients' records simultaneously, improve management of care and communication, and verify referrals. CHWs are also notified when their clients return to the community. This allows them to follow up and ensure health care is not limited to the clinic, thus being as pervasive as the mobile platform itself.

mSanté also strengthens key management practices by equipping supervisors at the community and facility levels with their own mobile application—to facilitate real-time supervision of CHWs' activities and develop performance improvement plans.

"We wish we had CommCare a long time ago."

"With CommCare, I will now be able to see the data from the health workers I supervise. To see exactly what are they are struggling with and decide how to better mentor them," says Hilarie Etienne, a supervisor from rural Fermathe that has worked as a CHW for 20 years. "I can say 'Oh, Jonathan, I see you

have only visited two clients last week. What is happening here?' Or 'Florian, this is how you can improve that.' I supervise five health workers. Now I will have the data. I will know exactly what to emphasize with each one."

MOBILE MONEY FOR FINANCIAL TRANSPARENCY AND INCLUSION

Supporting community and facility-based providers to deliver quality integrated care is just one piece of the puzzle. SSQH-CS is poised to launch the use of mobile money—using mobile phones to make health-related financial transactions, including payments to CHWs like Etienne—through the Haitian mobile banking service Tcho Tcho Mobile. Understanding that mobile money can impact transparency and efficiency of financial transactions, as well as enable financial inclusion for the poor, SSQH-CS is joining other USG-funded partners, including the USAID-funded HIFIVE project, to begin facilitating mobile money payments.

With the idea of sustainability as a constant goal, SSQH-CS strives to generate market demand for the use of mobile money by working with partners, like the HIFIVE project, in the creation of client education materials and mobile money systems—educational models and financial tools that can be scaled up nationally.

LED AND OWNED BY HAITI

mSanté activities would not be possible without the critical leadership of Haiti's MSPP, which has provided content design, training, and the integration of community health information systems.

All mSanté applications have been developed with input from the local providers themselves. Early on, CHWs pilot tested the applications during their home visits and, each week, gathered as a group to provide feedback on how the tools could be improved. For example, when CHWs recommended the applications be translated from French to Creole, the project promptly made this important change.

When asked what it means to be part of all this mSanté innovation, CHW Etienne says, "We feel proud. We believe our input was used. That is one of the reasons we say we wish we had CommCare a long time ago."

Today 2,137 family planning users, 661 pregnant women, and 2,494 children are registered to receive quality integrated care through mSanté.